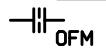



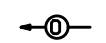
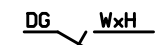
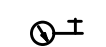

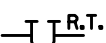
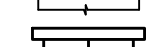

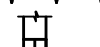

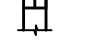
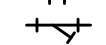




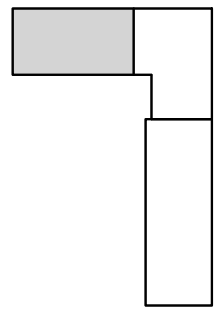
08 - MECHANICAL
INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
M-001	MECHANICAL INDEX OF DRAWINGS		
M-002	LEGEND & GENERAL NOTES		
M-003	WASH BAY & BAY AREA MECHANICAL PLAN		
M-004	OFFICE AREA MECHANICAL PLAN		
M-005	BAY AREA MECHANICAL PLAN		
M-006	TYPICAL MECHANICAL PIPING DETAILS		
M-007	TYPICAL HVAC DETAILS		
M-008	FUEL OIL TANK DETAILS		
M-009	FUEL OIL TANK PLAN		
M-010	OIL PIPING AND MISC. HVAC DETAILS		
M-011	MECHANICAL SCHEDULES		

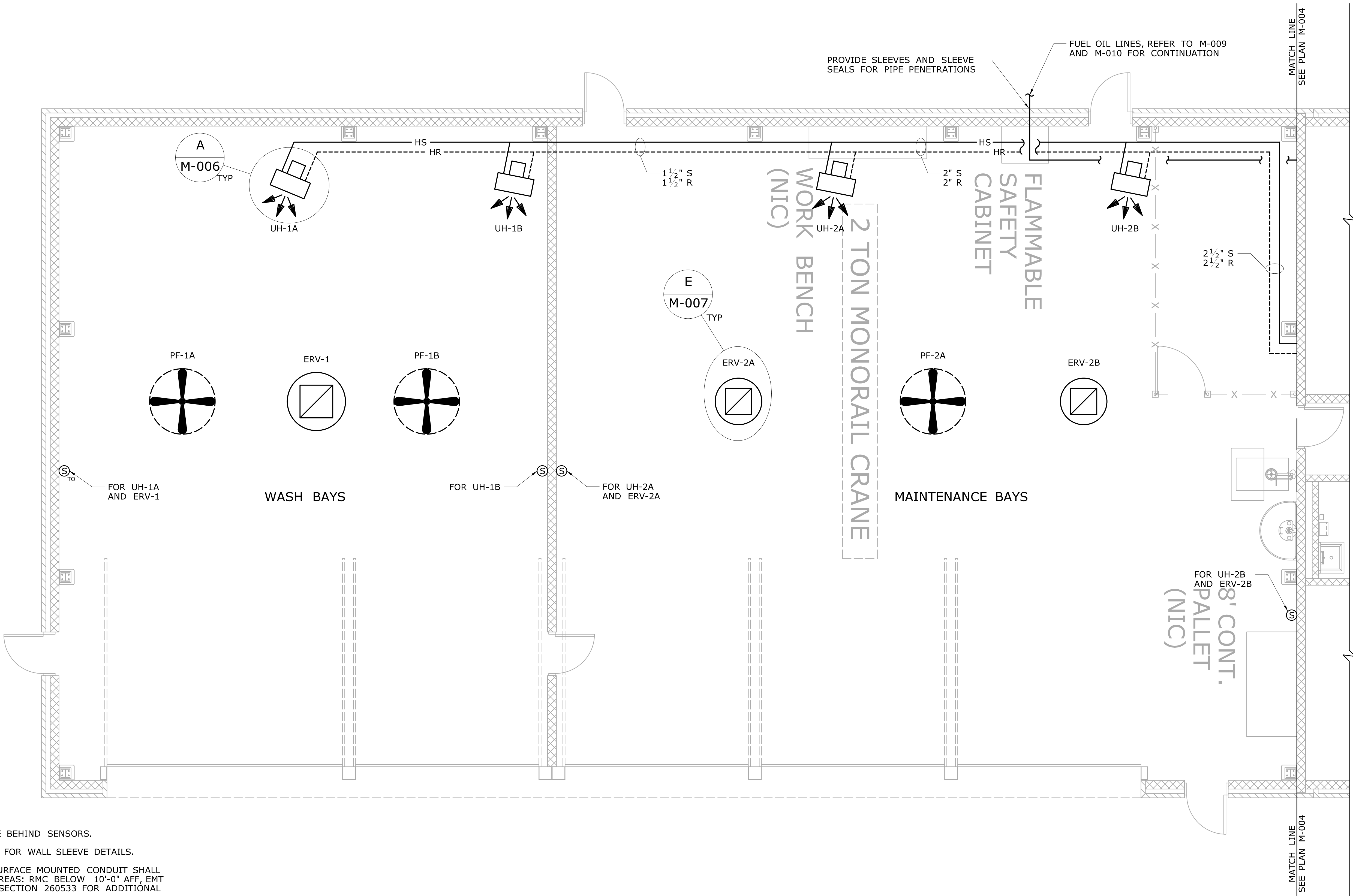
THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

TRANSPORTATION PRINCIPAL ENGINEER

LEGEND		LEGEND CONT.		LEGEND CONT.		ABBREVIATIONS		ABBREVIATIONS CONT.	
PIPING		PIPING SPECIALTIES CONT.		GRILLES, REGISTERS, AND DIFFUSERS					
—BD—	BOILER BLOW DOWN		FLOWMETER, ORIFICE		2-WAY CEILING DIFFUSER (D)	AC	AIR CONDITIONING	id	INSIDE DIAMETER
—CWR—	CHILLED WATER RETURN		FLOWMETER, VENTURI		4-WAY CEILING DIFFUSER (D)	AF	AXIAL FAN	JB	JUNCTION BOX
—CWS—	CHILLED WATER SUPPLY		OIL TRANSFER PUMP		DOOR GRILLE	AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
—CR—	CONDENSER WATER RETURN		PRESSURE GUAGE WITH BRASS PETCOCK		INTAKE LOUVERS ON SCREEN	AHU	AIR HANDLING UNIT	LAT	LEAVING AIR TEMPERATURE
—CS—	CONDENSER WATER SUPPLY		RUNNING TRAP		LINEAR DIFFUSER	AL	ACOUSTICAL LINING	LDB	LEAVING DRY BULB
—D—	DRAIN LINE		STRAIGHT TYPE THERMOMETER		LOUVER OPENING	AMB	AMBIENT	LWB	LEAVING WET BULB
—FR—	FUEL OIL RETURN		STRAINER		RETURN GRILLE (RG)	ATC	AUTOMATIC TEMPERATURE CONTROL	LWT	LEAVING WATER TEMPERATURE
—FS—	FUEL OIL SUCTION		WATER HAMMER ARRESTOR (WITH ACCESS DOOR IF REQUIRED)		UNDERCUT DOOR	AVG	AVERAGE		
—G—	GAS		ZONE CIRCULATING WATER PUMP			BAS	BUILDING AUTOMATION SYSTEM		
---HR---	HOT WATER RETURN					BDD	BACKDRAFT DAMPER	MAINT	MAINTENANCE
—HS—	HOT WATER SUPPLY					BO	BLANK OFF	max	MAXIMUM
—H—	HUMIDIFICATION LINE					BOD	BOTTOM OF DUCT	MBH	THOUSAND BTUH
—LG—	LIQUID PETROLEUM GAS					BOS	BOTTOM OF STEEL	min	MINIMUM
—MU—	MAKEUP WATER					BTUH	BRITISH THERMAL UNITS/HOUR	MOD	MOTOR OPERATED DAMPER
—RD—	REFRIGERANT DISCHARGE					C	CONVECTOR	MTD	MOUNTED
—RL—	REFRIGERANT LIQUID					CA	COMBUSTION AIR	N	NEUTRAL
—RS—	REFRIGERANT SUCTION					CAP	CAPACITY	NO	NUMBER
—W—	WASTE					CCH	CABINET CONVECTION HEATER	NOM	NOMINAL
-----	UNDERGROUND STORAGE TANK - ELECTRICAL CONDUIT					CFM	CUBIC FEET PER MINUTE	NTS	NOT TO SCALE
-----	UNDERGROUND STORAGE TANK - GASOLINE OR DIESEL					CLG	CEILING		
-----	UNDERGROUND STORAGE TANK - STAGE II VAPOR RECOVERY					CSBV	COMBINATION SHUTOFF & BALANCE	OA	OUTDOOR AIR
-----	VENT					CU	CONDENSING UNIT	oc	ON CENTER
						CUH	CABINET UNIT HEATER	od	OUTSIDE DIAMETER
						D	DIFFUSER	OL	OVER LOAD
						DBT	DRY BULB TEMPERATURE	OPP	OPPOSITE
						DC	DOOR CONTACT	PD	PRESSURE DROP
						dia	DIAMETER	PF	PADDLE FAN
						DN	DOWN	PH	PHASE
						DOD	DRAW OFF DRAIN	PLCS	PLACES
						DWG	DRAWING	PVC	POLY VINYL CHLORIDE CONDUIT
						EA	EXHAUST AIR	R	RETURN
						EAT	ENTERING AIR TEMPERATURE	rad	RADIUS
						EDB	ENTERING DRY BULB	RA	RETURN AIR
						EER	ENERGY EFFICIENCY RATIO	REQ'D	REQUIRED
						EF	EXHAUST FAN	RG	RETURN GRILLE
						EFF	EFFICIENCY	RHC	REHEAT COIL
						EL	ELEVATION	RMC	RIGID METAL CONDUIT
						ELEC	ELECTRICAL	RPM	REVOLUTIONS PER MINUTE
						ESP	EXTERNAL STATIC PRESSURE	RSC	RIGID STEEL CONDUIT
						EWB	ENTERING WET BULB		
						EWT	ENTERING WATER TEMPERATURE	S	SUPPLY
						EXH	EXHAUST	SA	SUPPLY AIR
						FA	FRESH AIR	SD	SMOKE DETECTOR
						FC	FLEXIBLE CONNECTION	SEER	SEASONAL ENERGY EFFICIENCY RATIO
						FCU	FAN COIL UNIT	SP	STATIC PRESSURE
						FD	FIRE DAMPER	SQ	SQUARE
						FO	FUEL OIL	STD	STANDARD
						FPM	FEET PER MINUTE	TCM	THERMOSTAT CONTROL MODULE
						FRP	FIBERGLASS REINFORCED PIPE	TEMP	TEMPERATURE
						FT	FOOT/FEET	TSP	TOTAL STATIC PRESSURE
						FTR	FINNED TUBE RADIATION	TYP	TYPICAL
						GA	GAUGE	UH	UNIT HEATER
						GAL	GALLON	UON	UNLESS OTHERWISE NOTED
						GALV	GALVANIZED	UST	UNDERGROUND STORAGE TANK
						GPM	GALLONS PER MINUTE	UV	UNIT VENTILATOR
						H	HOT	V	VOLT
						HM	HOT WATER MAIN LOOP	VAC	VOLTAGE ALTERNATING CURRENT
						HP	HORSEPOWER	VAV	VARIABLE AIR VOLUME
						HGT	HEIGHT	VD	VOLUME DAMPER
						HV	HEATING AND VENTILATION	VIF	VERIFY IN FIELD
						HVAC	HEATING, VENTILATION, AND AIR CONDITIONING		
						HWB	HOT WATER BOILER	W/	WITH
						HWR	HOT WATER RETURN	WG	WATER GAUGE
						HWS	HOT WATER SUPPLY	WBT	WET BULB TEMPERATURE
						HZ	HERTZ	WPD	WATER PRESSURE DROP
								WTD	WATER TEMPERATURE DROP
								GENERAL NOTES CONT.	
				7. METHODS OF ATTACHMENT OF SEISMIC RESTRAINT CABLES SHALL COMPLY WITH THE FOLLOWING:					
				a. TO EQUIPMENT: BOLT ANGLE CLIPS TO SUSPENDED EQUIPMENT ADJACENT TO THE HANGER RODS. ORIENT THE FOUR SEISMIC CABLES 90° TO EACH OTHER. ATTACH SEISMIC CABLES TO ANGLE CLIPS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.					
				b. TO STRUCTURE: ATTACH SEISMIC CABLE TO TOP CORD OF ROOF JOISTS WITH APPROPRIATE FASTENING DEVICES. WELDING, BURNING, OR DRILLING OF THE ROOF JOISTS SHALL NOT BE PERMITTED. THE SEISMIC CABLE SHALL BE DRAWN TAUT BUT SHALL NOT DISPLACE THE UNITS. ATTACHMENT TO BOTTOM CHORD OF ROOF JOISTS SHALL NOT BE PERMITTED! PROVIDE DESIGNER WITH METHOD OF ATTACHMENT TO ROOF JOISTS FOR APPROVAL.					
				8. UNLESS OTHERWISE INDICATED, ALL BRANCH PIPING SHALL BE OFF THE BOTTOM OF THE MAIN PIPING RUN.					
				9. REFER TO SUPPORTING DOCUMENTS SUBSET FOR PAY LIMITS FOR MAJOR LUMP SUM ITEM (MLSI). EXCAVATION FOR MECHANICAL SYSTEMS WITHIN THESE LIMITS IS INCLUDED FOR PAYMENT IN THE MLSI. THERE WILL BE NO SEPARATE PAYMENT FOR EXCAVATION FOR THESE SYSTEMS.					



KEY PLAN



NOTES:

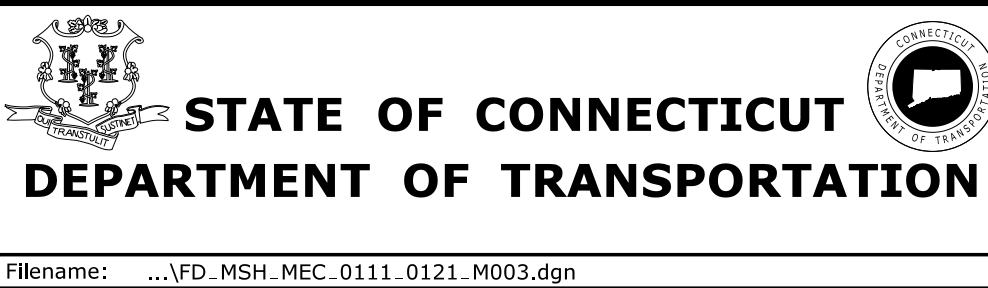
1. CONTRACTOR SHALL INSULATE BEHIND SENSORS.
2. REFER TO PLUMBING SUBSET FOR WALL SLEEVE DETAILS.
3. THE FOLLOWING TYPES OF SURFACE MOUNTED CONDUIT SHALL BE INSTALLED IN THE BAY AREAS: RMC BELOW 10'-0" AFF, EMT ABOVE 10'-0". REFER TO CSI SECTION 260533 FOR ADDITIONAL INFORMATION.
4. REFER TO ELECTRICAL DRAWINGS FOR PADDLE FAN SPEED CONTROLLER LOCATIONS.

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

Plotted Date: 8/5/2015

DESIGNER/DRAFTER:
NAR
CHECKED BY:
JAB
SCALE: 1/4" = 1'-0"



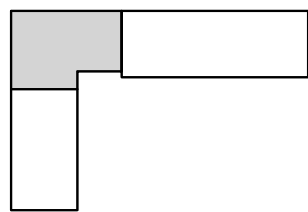
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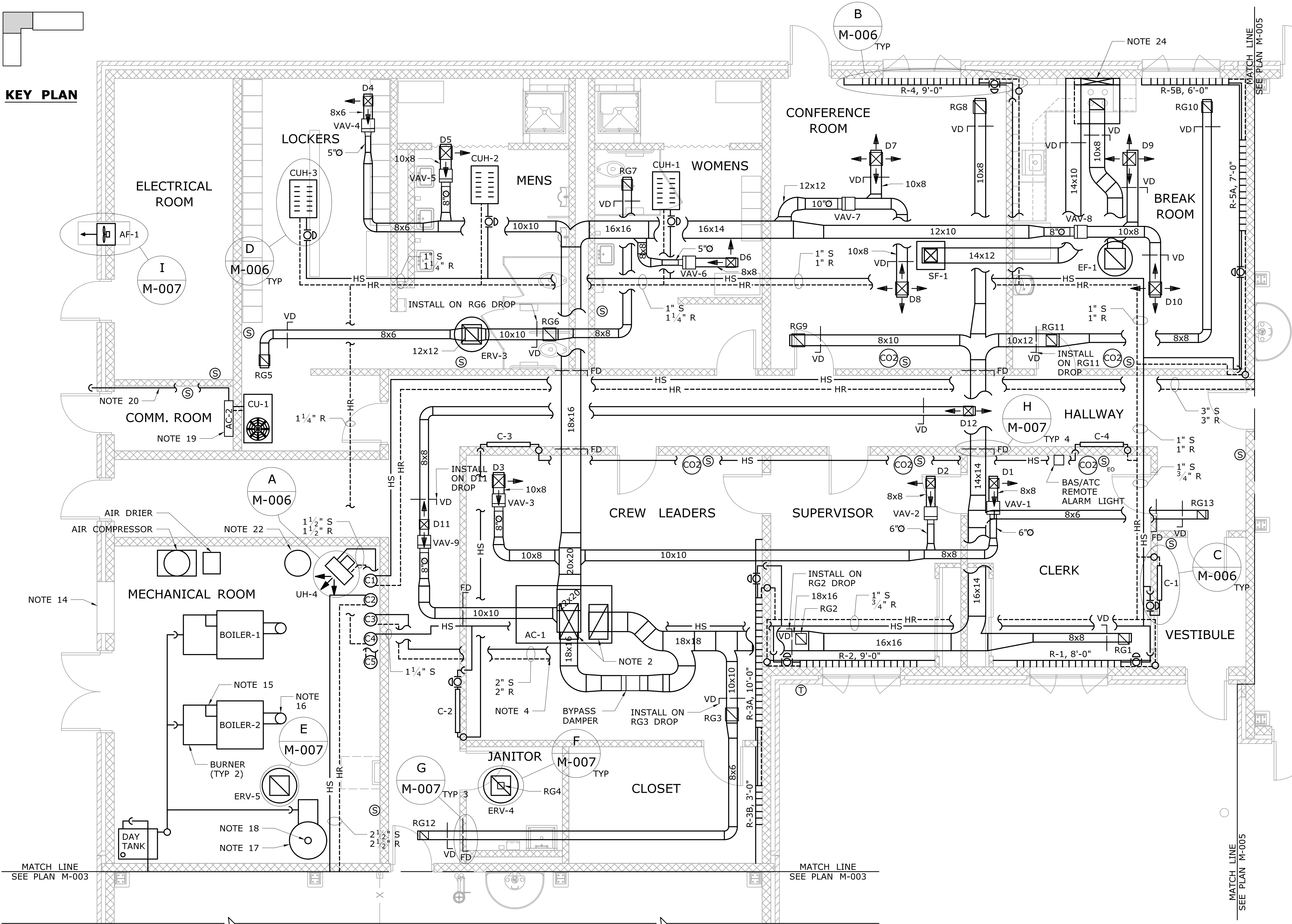
PROJECT TITLE:
POMFRET MAINTENANCE FACILITY

TOWN:
POMFRET
DRAWING TITLE:
NORTH BAY AREA MECHANICAL PLAN

PROJECT NO.
111-121
DRAWING NO.
M-003
SHEET NO.
08.03



KEY PLAN




NOTES:

- DUCT MOUNTED SMOKE DETECTOR TO BE FURNISHED IN SUPPLY AND RETURN PLENUM, WIRED, AND CONNECTED BY THE ELECTRICAL INSTALLER. TO BE INSTALLED BY THE MECHANICAL INSTALLER. REFER TO ELECTRICAL DRAWINGS.
- OPENING THRU ROOF FOR AC-1. FIELD VERIFY SIZE WITH APPROVED AC UNIT BASED UPON AS SPECIFIED.
- $\boxed{L}\boxed{S}\boxed{V}$, IN SUPPLY DUCTWORK UP THROUGH ROOF TO ROOFTOP UNIT.
- TO HYDRONIC HEATING COIL (HWC-1) IN SUPPLY DUCTWORK. REFER TO DRAWING NO. M-006 FOR HWC PIPING DIAGRAM.
- PROVIDE RECTANGULAR TO ROUND DUCT TRANSITIONS AT VAV DAMPER LOCATIONS.
- EXHAUST DUCTWORK IN BATHROOMS AND JANITOR'S CLOSET SHALL BE ALUMINUM IN ACCORDANCE WITH CSI SECTION 233113.
- REFER TO DRAWING NO. A-104 FOR THE REFLECTED CEILING PLAN.
- REFER TO DRAWING NO. M-007 FOR DUCT DETAILS.
- INSTALL CONVECTOR AND FIN TUBE RADIATION PIPING IN ACCORDANCE WITH THE DETAILS ON DRAWING NO. M-006. ALL PIPING DROPS AND RISES SHALL BE IN THE ENCLOSURE AND WALLS, SOME LOCATIONS SHOWN ARE FOR CLARITY ONLY. TWO POSITION HOT WATER CONTROL VALVES SHALL BE WITHIN THE ENCLOSURES, LOCATIONS SHOWN ARE FOR CLARITY ONLY.
- REFER TO PLAN M-006 FOR HYDRONIC PIPING DIAGRAM.
- REFER TO PLUMBING SUBSET FOR EXTERIOR WALL, FLOOR, AND FIRE WALL PIPE SLEEVE DETAILS.
- SURFACE MOUNTED CONDUITS IN THE MECHANICAL, ELECTRICAL, DATA, AND BAY AREAS SHALL BE: RMC BELOW 10'-0" AFF, EMT ABOVE 10'-0". REFER TO CSI SECTION 260533 FOR ADDITIONAL INFORMATION.
- EQUIPMENT IS TO BE INSTALLED ON 6" THICK CONCRETE PADS, SIZED 4" LARGER ON EACH SIDE THAN THE EQUIPMENT BASE INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
a. BOILERS 1 & 2 - ONE PAD
b. DAY TANK - ONE PAD
c. WATER HEATER - ONE PAD
d. EXPANSION TANK - ONE PAD
e. AIR COMPRESSOR AND AIR DRYER - ONE PAD
CONCRETE PADS SHALL BE INSTALLED BY THE CONCRETE INSTALLER IN THE LOCATIONS INDICATED BY THE MECHANICAL INSTALLER.
- TWO COMBUSTION AIR LOUVERS WITH MOTORIZED ACTUATORS, WITH A MINIMUM OF 5.33 SQUARE FEET OF FREE AREA EACH, ONE 12" ABOVE FLOOR LEVEL AND ONE 12" BELOW CEILING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND SIZE. INTERLOCK WITH BURNERS FOR BOILERS (BY BAS/INSTALLER).
- BOILER OVERRIDE (AUTO/MANUAL) SWITCH TO BE INSTALLED BY BAS/ATC INSTALLER (TYP 2 PLCS).
- 10" i.d. BREECHING AND CHIMNEY (TYP 2 PLCS), REFER TO DETAIL ON DRAWING NO. M-010.
- WATER HEATER, REFER TO DETAIL ON DRAWING NO. P-010.
- 6"i.d. BREECHING AND CHIMNEY WITH BAROMETRIC DAMPER.
- AC-2 MOUNTED 7' AFF TO BOTTOM OF UNIT, CU-1 IS ROOF MOUNTED. PROVIDE REFRIGERANT PIPING FROM CU-1 TO AC-2. SIZE REFRIGERANT PIPING PER MANUFACTURERS REQUIREMENTS.
- PROVIDE CONDENSATE DRAIN PIPING FROM AC-2 TO OUTSIDE OF BUILDING. CONTRACTOR SHALL MAINTAIN $\frac{3}{8}$ " PER FOOT MINIMUM DRAINING PITCH AND RUN PIPING TIGHT TO WALLS.
- PIPE CONDENSATE DRAIN FOR AC-1 AND CU-1 A MINIMUM OF 1'-0" AWAY TOWARDS ROOF DRAIN.
- 106 GALLON (FULL ACCEPTANCE) BLADDER-TYPE EXPANSION TANK, FLOOR MOUNTED.
- CONTRACTOR SHALL INSULATE BEHIND SENSORS.
- TYPE II COMMERCIAL KITCHEN EXHAUST HOOD WITH BACK SUPPLY PLENUM. REFER TO CSI SECTION 233813 FOR MORE INFORMATION.


REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 8/5/2015

DESIGNER/DRAFTER: NAR	CHECKED BY: JAB
SCALE: $\frac{1}{4}$ " = 1'-0"	

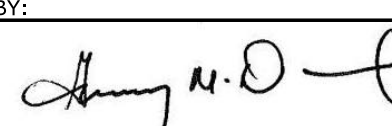


STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

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OFFICE OF ENGINEERING

APPROVED BY:


PROJECT TITLE:
POMFRET MAINTENANCE FACILITY

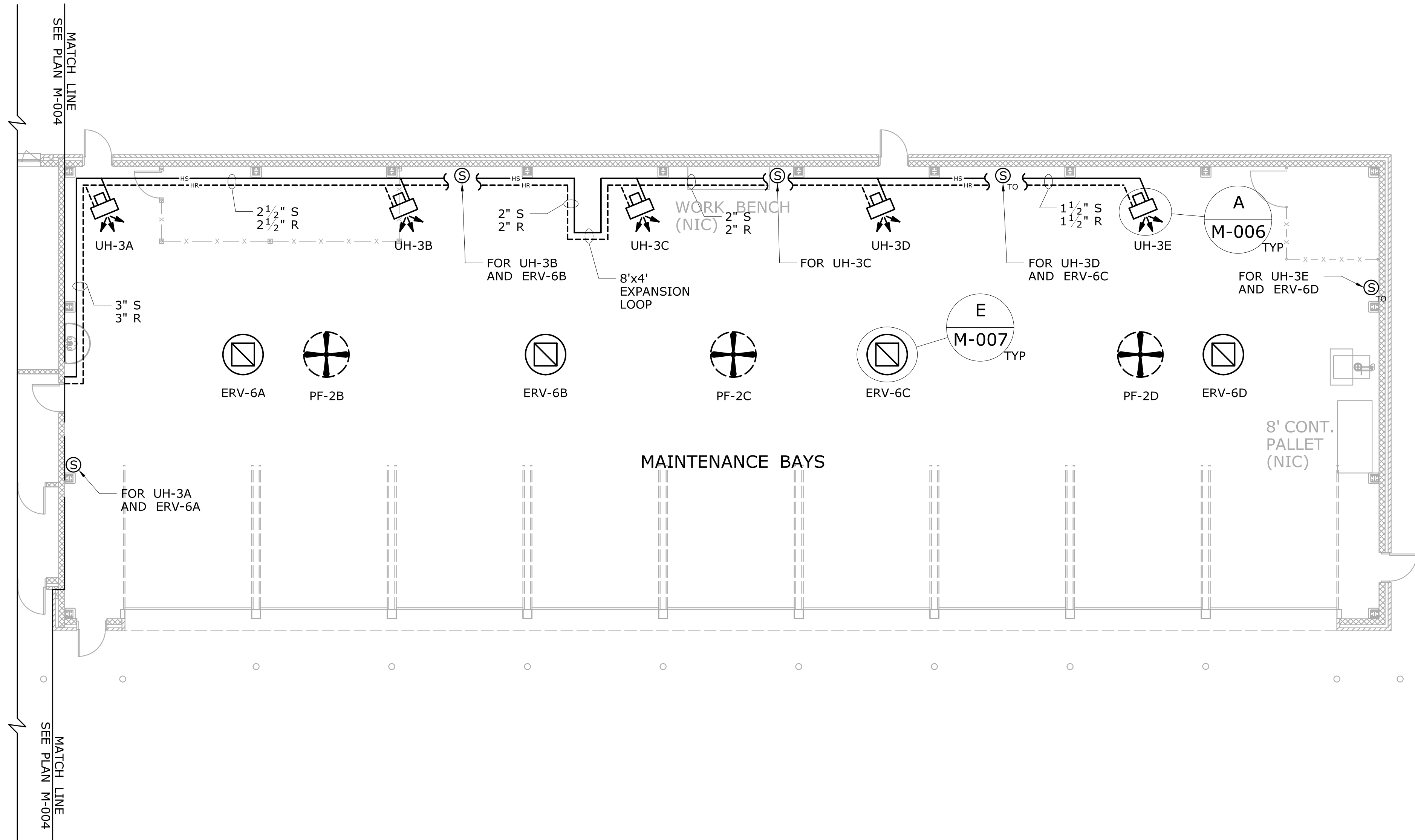
TOWN:
POMFRET

DRAWING TITLE:
OFFICE AREA MECHANICAL PLAN

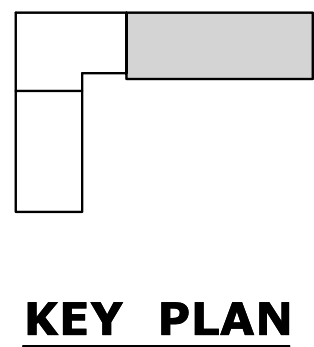
PROJECT NO.
111-121


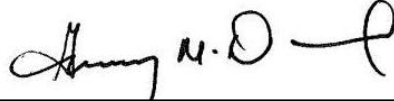
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M-004

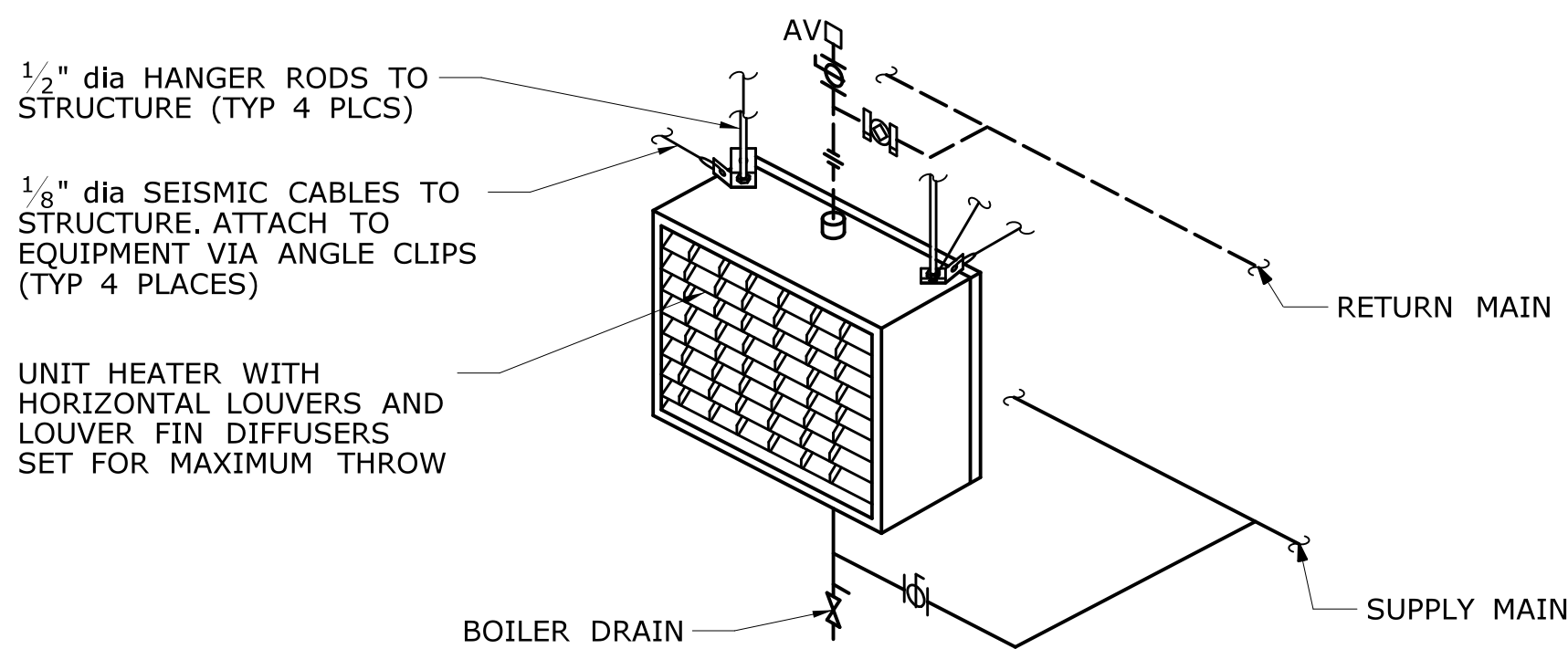
SHEET NO.
08.04



- NOTES:
- 1. CONTRACTOR SHALL INSULATE BEHIND SENSORS.
 - 2. REFER TO PLUMBING SUBSET FOR WALL SLEEVE DETAILS.
 - 3. THE FOLLOWING TYPES OF SURFACE MOUNTED CONDUIT SHALL BE INSTALLED IN THE BAY AREAS: RMC BELOW 10'-0" AFF, EMT ABOVE 10'-0". REFER TO CSI SECTION 260533 FOR ADDITIONAL INFORMATION.
 - 4. REFER TO ELECTRICAL DRAWINGS FOR PADDLE FAN SPEED CONTROLLER LOCATIONS.



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REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 8/5/2015										
				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.										



NOTE:

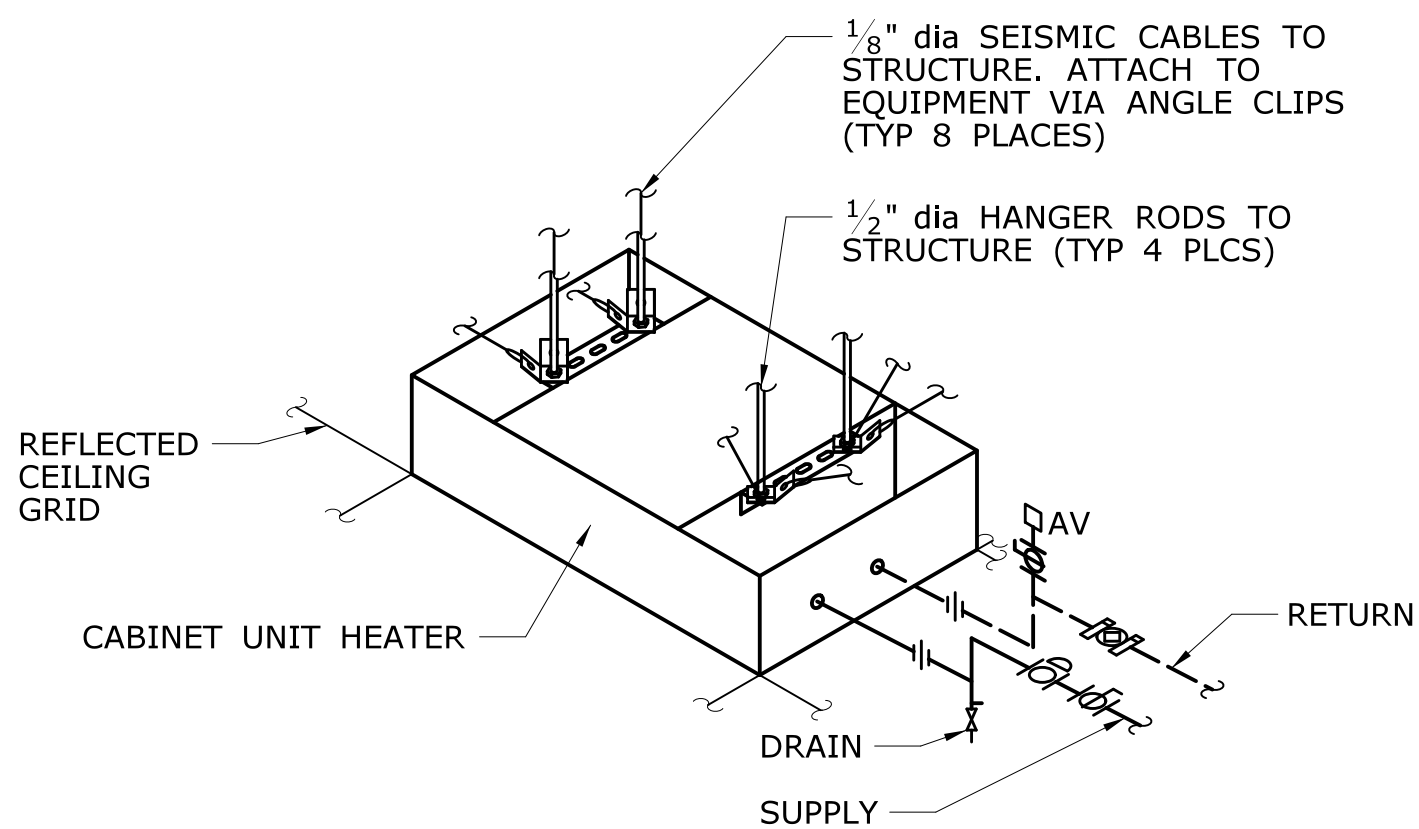
1. PROVIDE OSHA FAN GUARD

**TYPICAL
HORIZONTAL UNIT HEATER PIPING DETAIL**

A
M-003

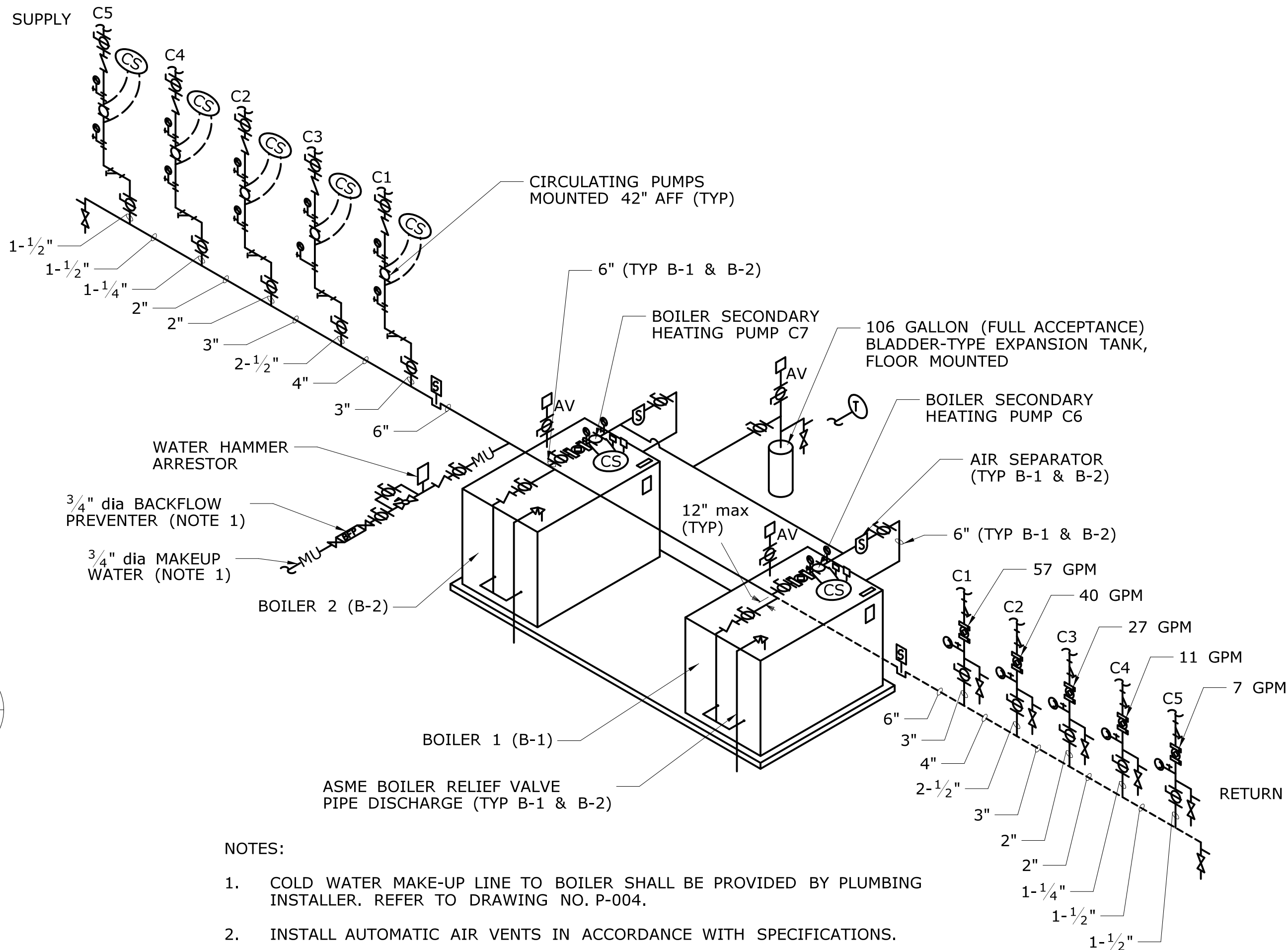
A
M-004

A
M-005



**TYPICAL
CABINET UNIT HEATER PIPING DETAIL**

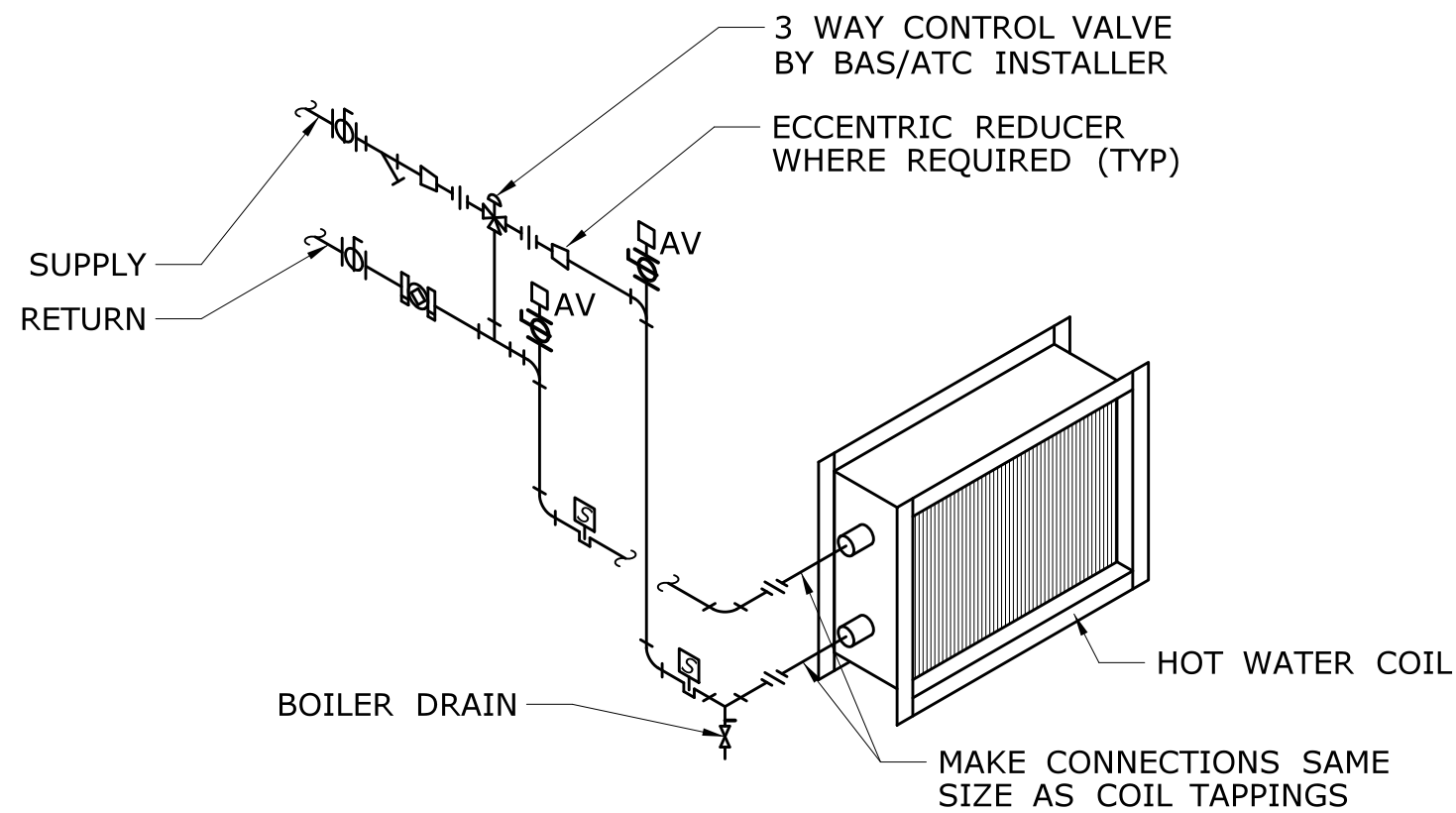
D
M-004



NOTES:

1. COLD WATER MAKE-UP LINE TO BOILER SHALL BE PROVIDED BY PLUMBING INSTALLER. REFER TO DRAWING NO. P-004.
2. INSTALL AUTOMATIC AIR VENTS IN ACCORDANCE WITH SPECIFICATIONS.

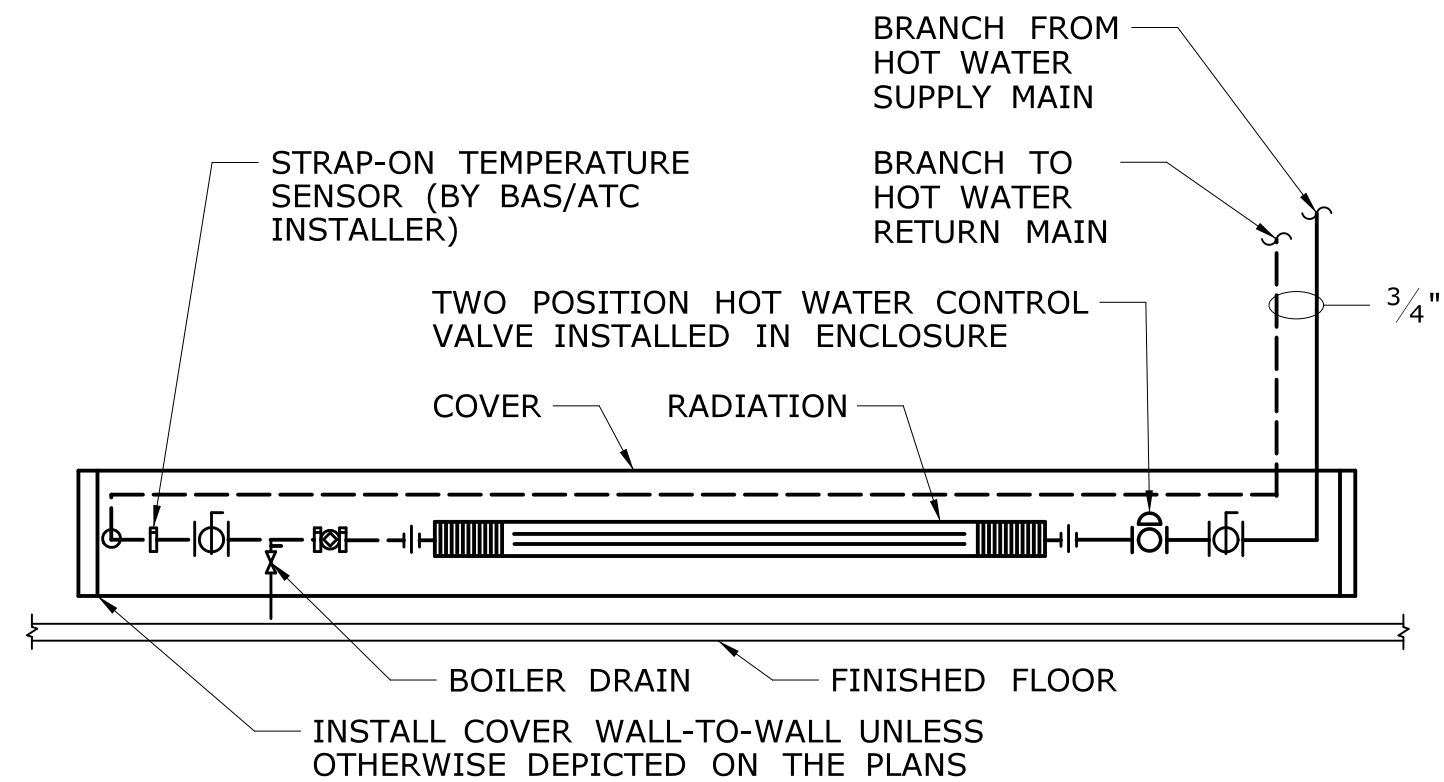
HYDRONIC PIPING DIAGRAM



NOTE:

1. CONNECTIONS TO COIL INLET AND OUTLET SHALL BE FULL SIZE OF COIL TAPPINGS AND SHALL BE PROVIDED WITH UNIONS OR FLANGES TO FACILITATE COIL REMOVALS AND CONNECTIONS TO ADDED COILS.
2. MAKE BRANCH PIPING CONNECTIONS TO COIL HEADERS TO ACHIEVE AIR-WATER COUNTERFLOW. PLUG COIL HEADER TAPPINGS WITH NO CONNECTIONS.
3. REFER TO SPECIFICATION SECTION 230993, "SEQUENCE OF OPERATIONS" FOR ADDITIONAL INFORMATION.

**DUCT MOUNTED HOT WATER COIL
(HWC) PIPING DETAIL**

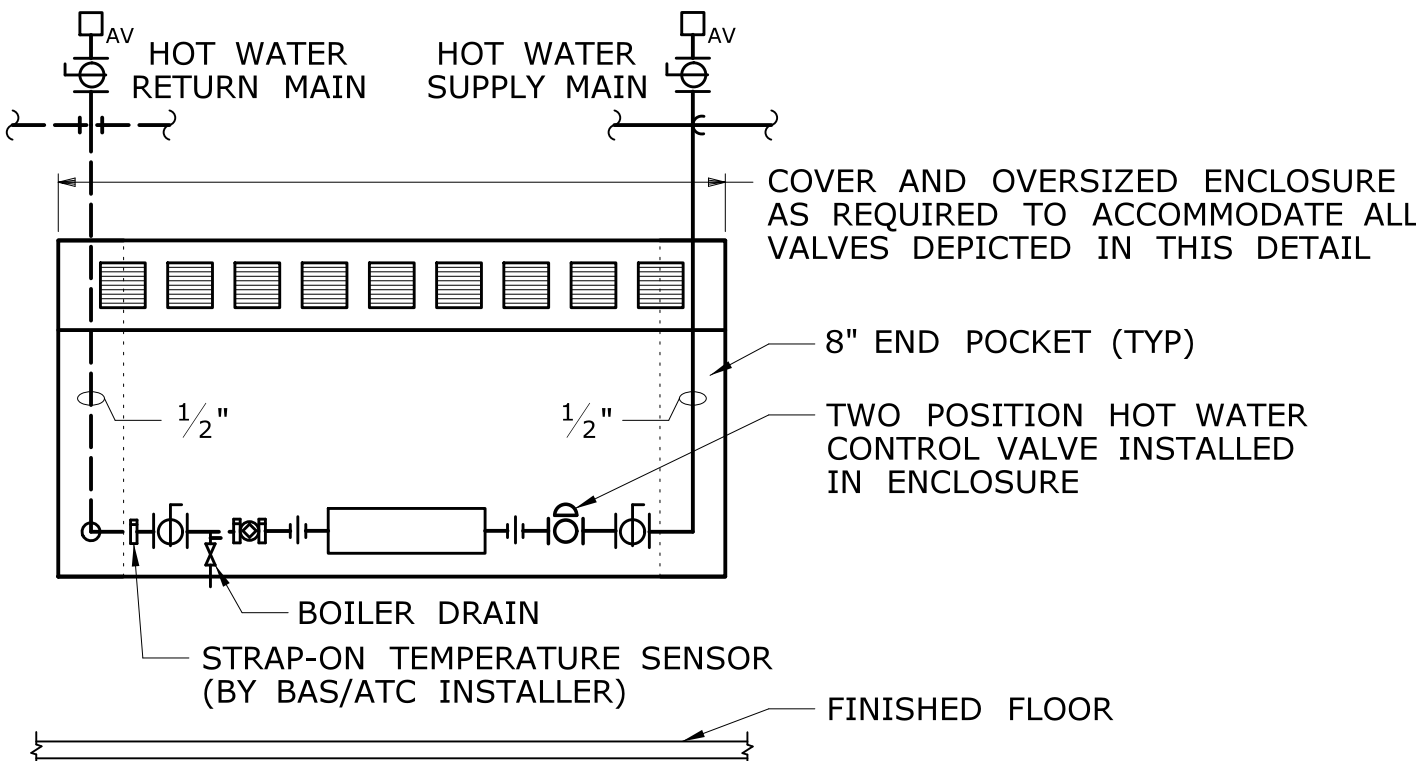


NOTE:

1. GC TO COORDINATE THE INSTALLATION OF THE FINNED TUBE RADIATION WITH THE INSTALLATION OF THE FINISH FLOOR TO PREVENT DAMAGE TO THE EXPOSED PIPING, FINS, PIPING SPECIALTIES, AND ENCLOSURE (INCLUDING BACK PANEL). DAMAGED WORK DEEMED TO BE UNACCEPTABLE TO THE ENGINEER SHALL BE REMOVED AND REPLACED.
2. PROVIDE AIR VENTS WITH BALL VALVE AT HIGH POINTS IN PIPING.

**TYPICAL
FIN TUBE RADIATION PIPING DETAIL**

B
M-004





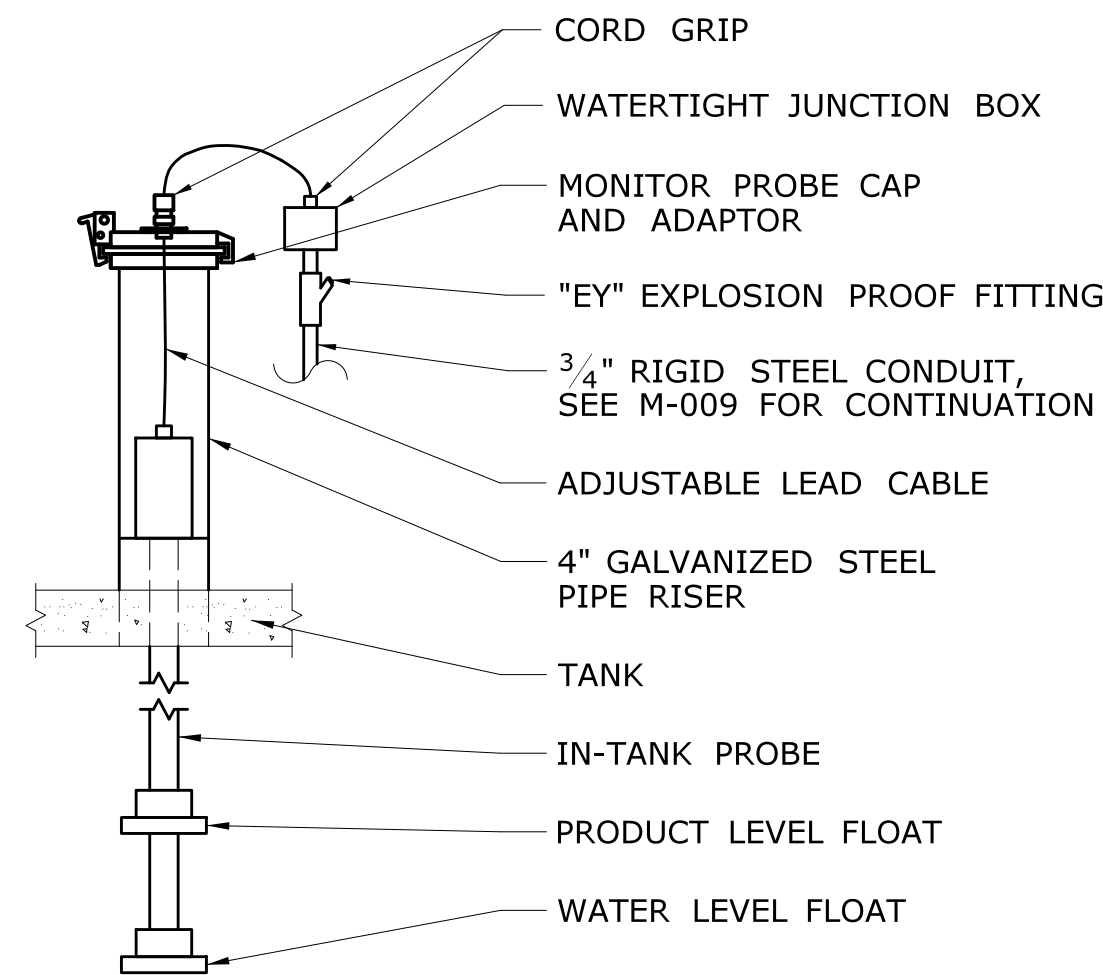
NOTE:

1. GC TO COORDINATE THE INSTALLATION OF THE CONVECTORS WITH THE INSTALLATION OF THE FINISH FLOOR TO PREVENT DAMAGE TO THE EXPOSED PIPING, HEATING ELEMENT, PIPING SPECIALTIES, AND ENCLOSURE (INCLUDING BACK PANEL). DAMAGED WORK DEEMED TO BE UNACCEPTABLE TO THE ENGINEER SHALL BE REMOVED AND REPLACED.
2. PROVIDE AIR VENTS WITH BALL VALVE AT HIGH POINTS IN PIPING.

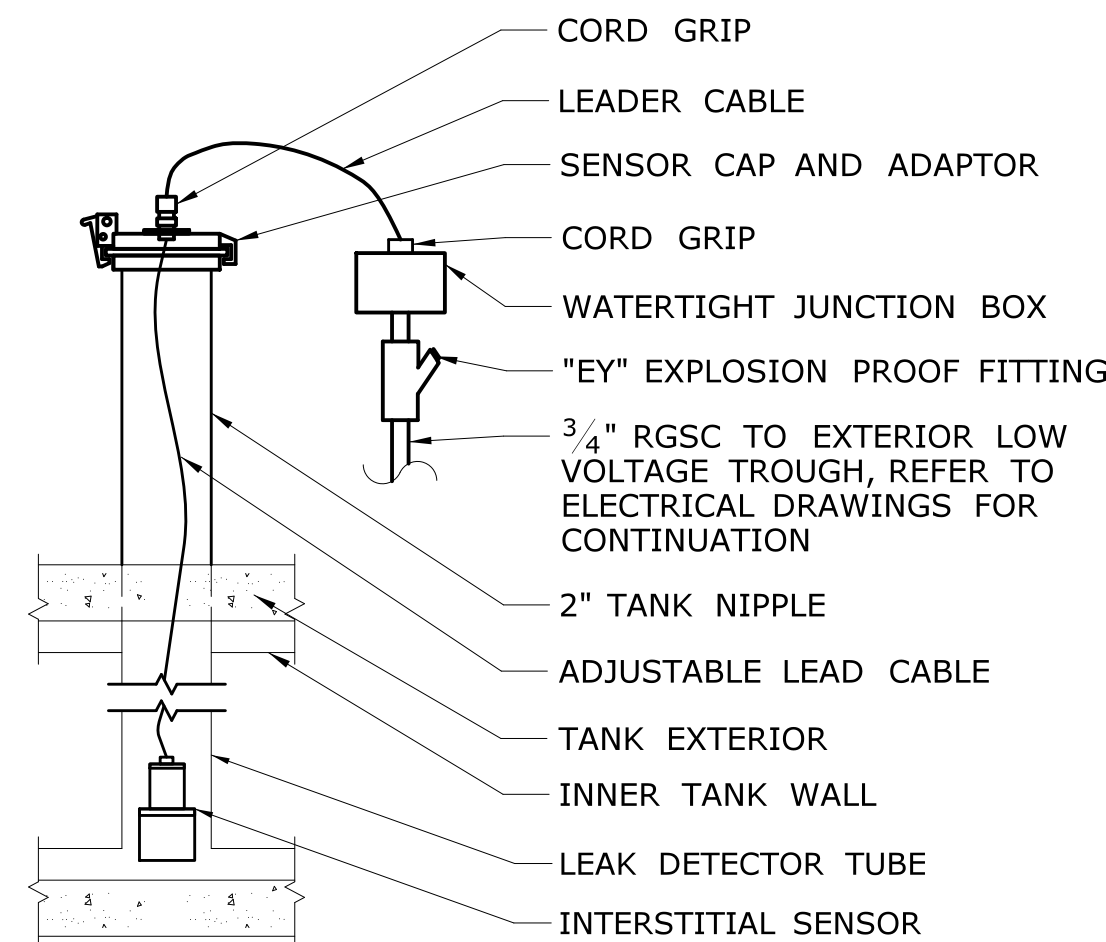
TYPICAL CONVECTOR PIPING DETAIL

C
M-004

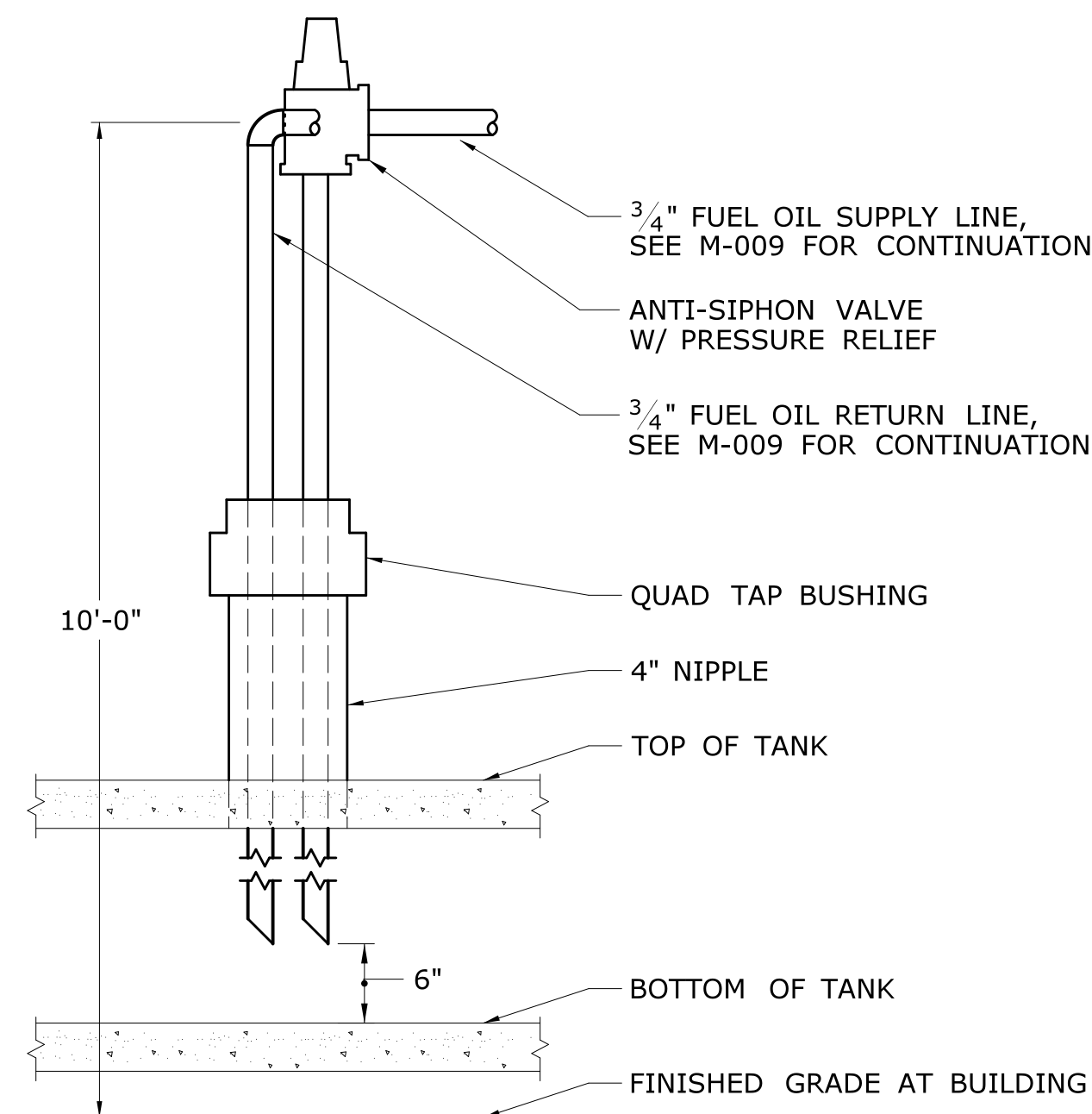
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						CHECKED BY: JAB															
						NOT TO SCALE															
REV.	DATE	REVISION DESCRIPTION		SHEET NO.	Plotted Date: 8/5/2015				Filename: ...\\FD_MSH_MEC_0111_0121_M006.dgn												



IN-TANK PROBE DETAIL



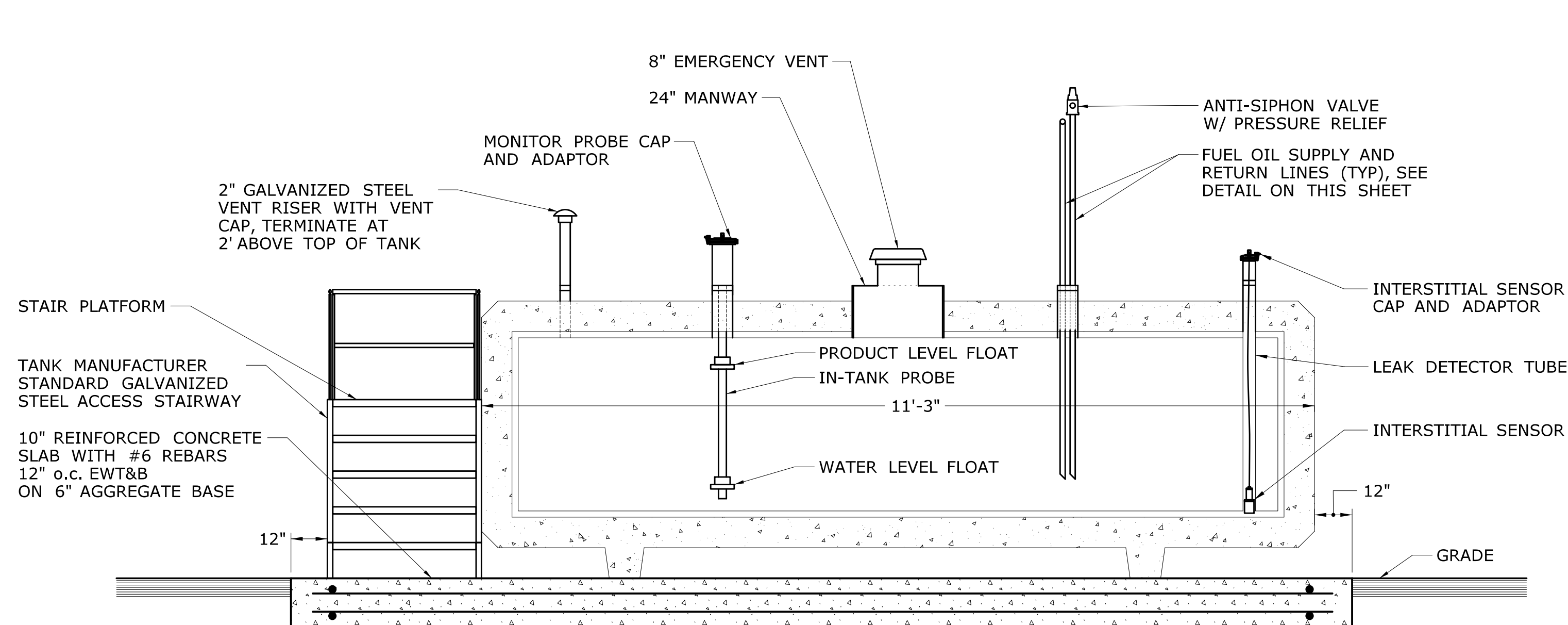
INTERSTITIAL SENSOR DETAIL



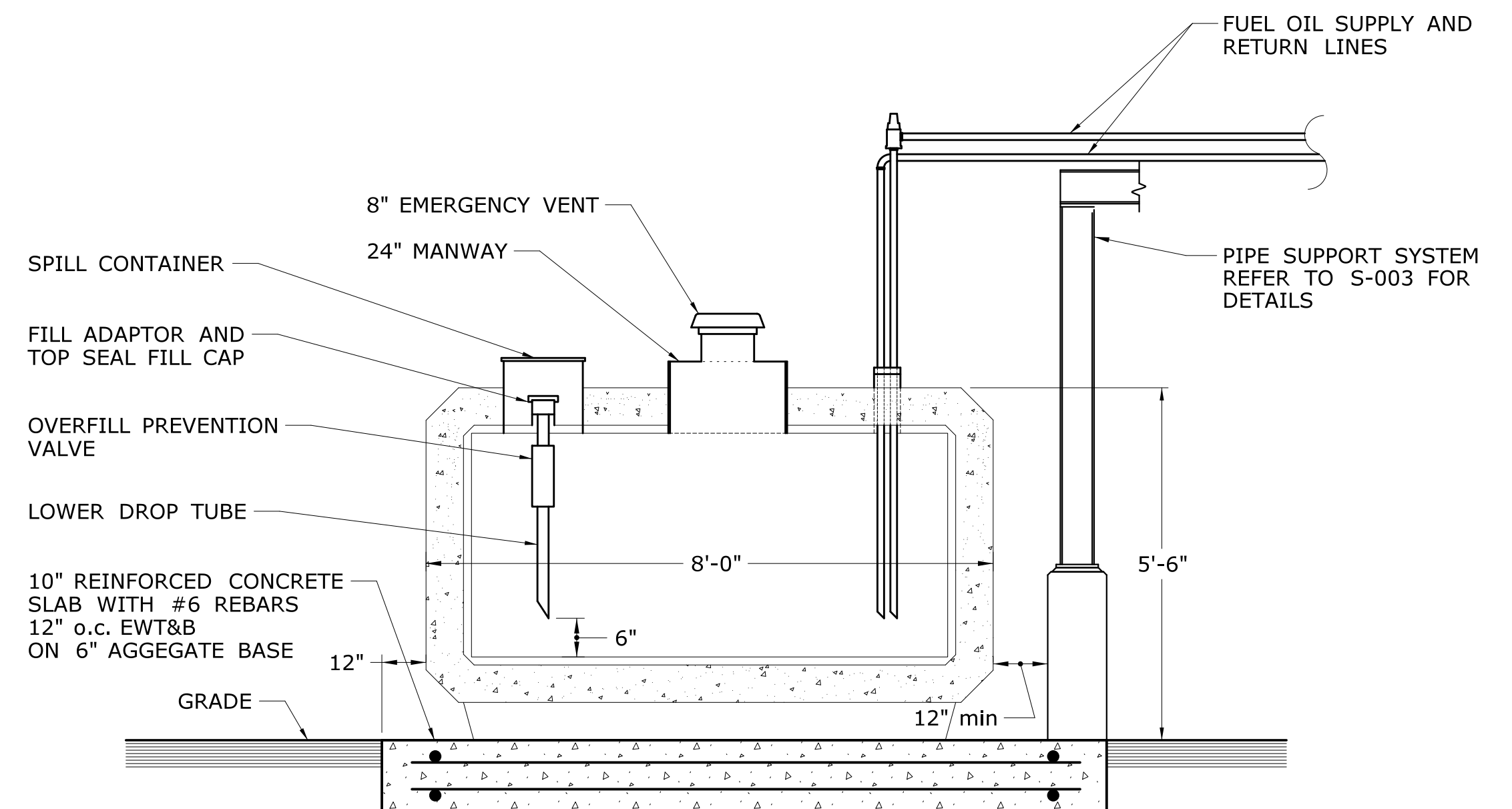
TYPICAL FUEL OIL PRODUCT PIPING DETAIL

NOTES:

1. THE DESIGNED TANK DIMENSIONS AND SUPPORT LEG LOCATIONS ARE BASED ON CONVAULT. ACTUAL SLAB DIMENSIONS SHALL BE SIZED BASED ON THE APPROVED TANK DIMENSIONS AND SUPPORT LEG LOCATIONS.
2. THE TANK NIPPLE ARRANGEMENT IS BASED ON CONVAULT TANKS. ACTUAL TANK NIPPLE ARRANGEMENT SHALL BE DESIGNED AS NECESSARY BASED ON THE APPROVED TANK MANUFACTURER.
3. ALL CONDUITS SHALL BE PROVIDED WITH EXPLOSION PROOF FITTINGS AND SEALED AS REQUIRED IN ACCORDANCE WITH NFPA 70.



SIDE VIEW A
M-009

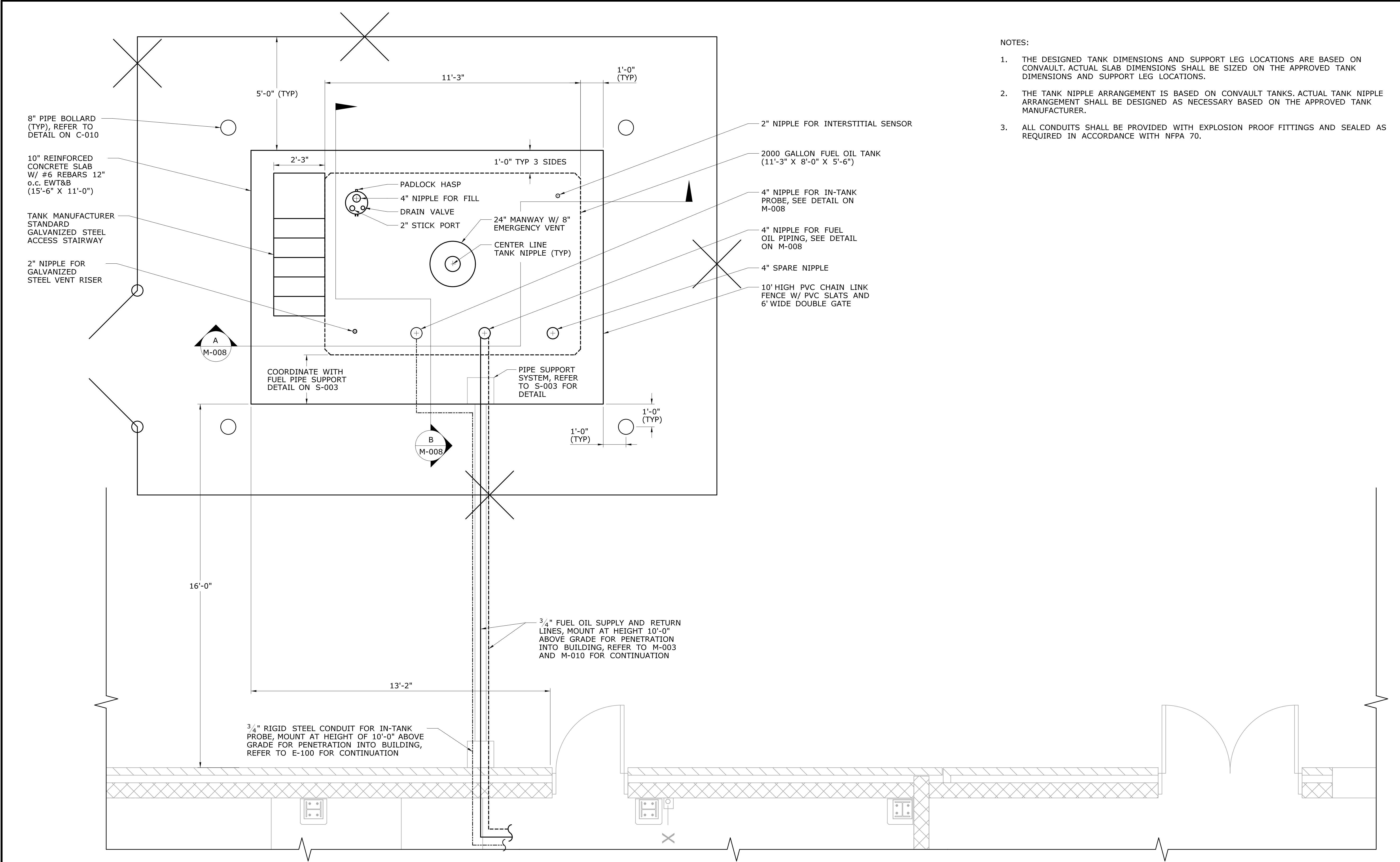


END VIEW B
M-009



2000 GALLON FUEL OIL ABOVEGROUND STORAGE TANK DETAIL

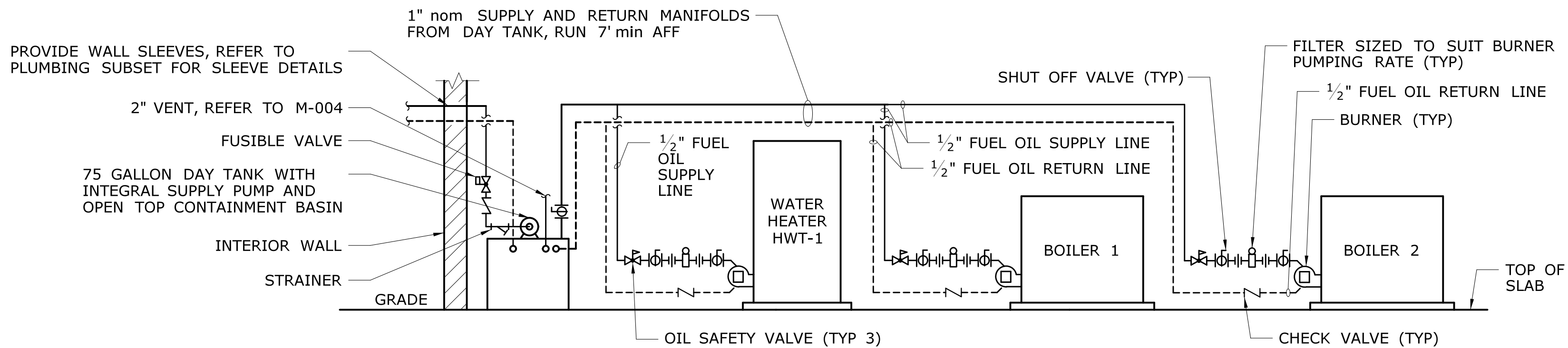
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THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.



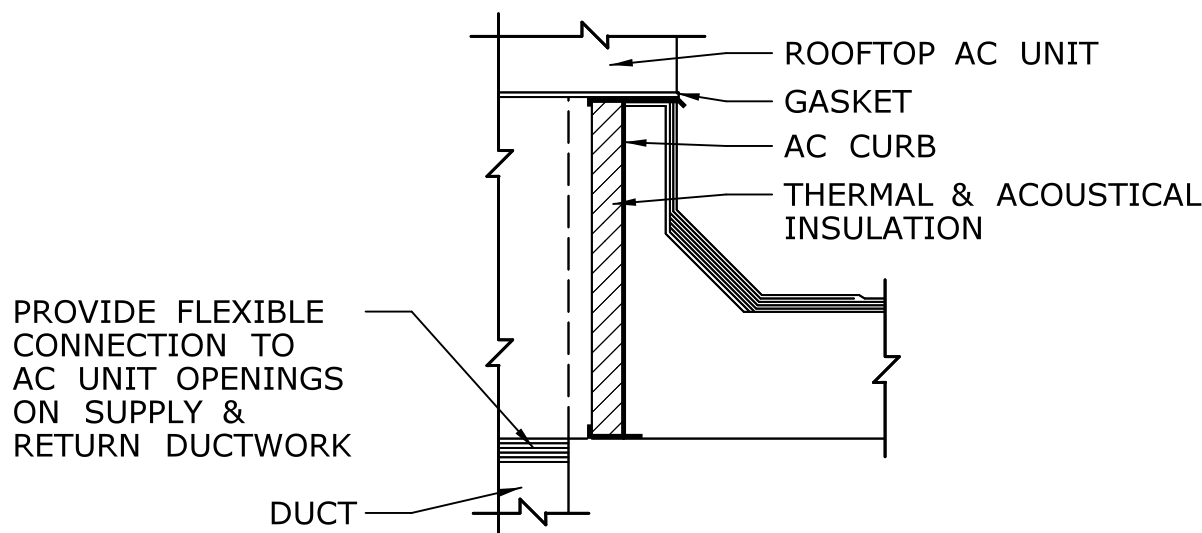
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				DESIGNER/DRAFTER: NAR		 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: POMFRET MAINTENANCE FACILITY	TOWN: POMFRET	PROJECT NO. 111-121			
				CHECKED BY: JAB							APPROVED BY: 	DRAWING TITLE: FUEL OIL TANK PLAN	DRAWING NO. M-009
				NOT TO SCALE									
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 8/5/2015		Filename: ...\\FD_MSH_MEC_0111_0121_M009.dgn							
				THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.									



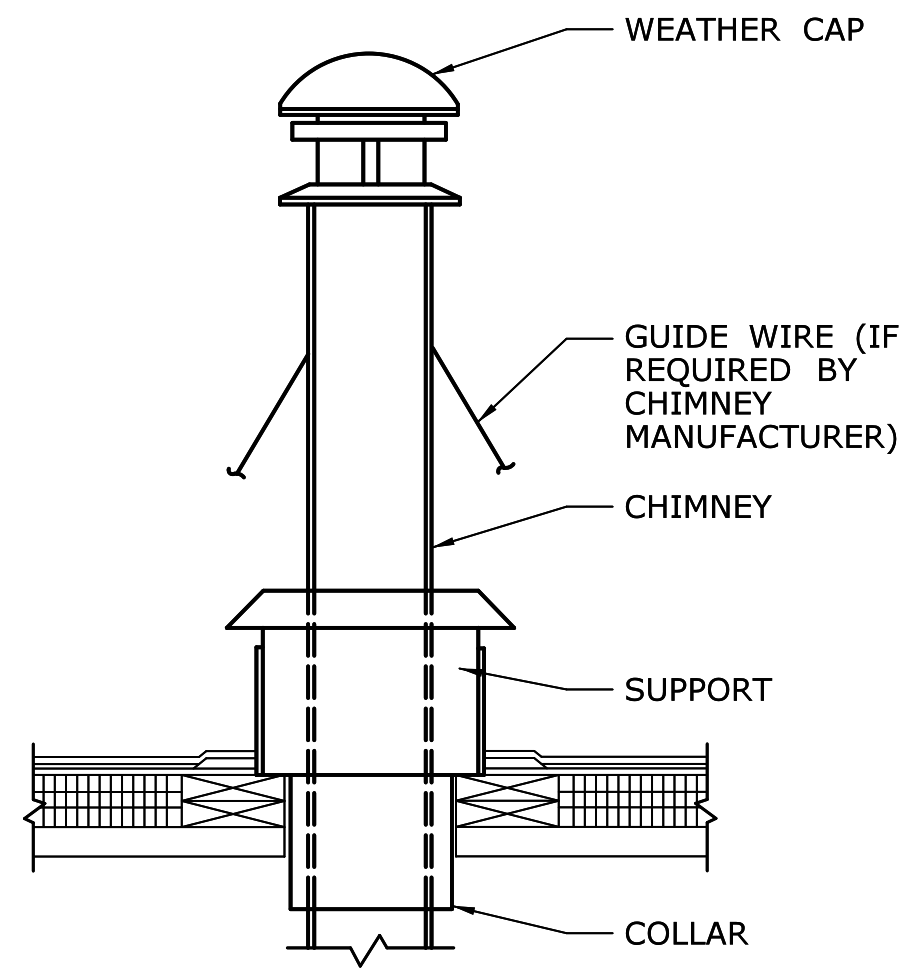
BURNER FUEL OIL PIPING DETAIL

NOT TO SCALE





ROOFTOP AIR CONDITIONER CURB DETAIL

NOTE: REFER TO A-504 FOR FLASHING DETAILS.



BOILER CHIMNEY PENETRATION DETAIL

NOTE: REFER TO A-504 FOR ROOF DETAILS.

				DESIGNER/DRAFTER: NAR		 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	SIGNATURE/ BLOCK: OFFICE OF ENGINEERING	PROJECT TITLE: POMFRET MAINTENANCE FACILITY	TOWN: POMFRET	PROJECT NO. 111-121			
				CHECKED BY: JAB							APPROVED BY: 	DRAWING TITLE: OIL PIPING AND MISC. HVAC DETAILS	DRAWING NO. M-010
				NOT TO SCALE									
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 8/5/2015		Filename: ...\\FD_MSH_MEC_0111_0121_M010.dgn							
								SHEET NO. 08.10					

ROOFTOP AIR CONDITIONER SCHEDULE																	
MARK	AREA SERVED	MODEL NO.	CFM	OA CFM	COOLING LOAD		EDB	EWB	LDB	LWB	ESP	EER	SEER	COMP MOTOR	IND FAN MOTOR	OUT FAN MOTOR	VOLT/PH/HZ
					SENSIBLE	LATENT											
AC-1	OFFICE	THC092F3R0A	3303	948	64.85	20.51	78.60	65.10	58.69	55.85	1.40	12.6	----	6.07 kW	1.65 kW	0.71 kW	208V, 3PH, 60HZ
AC-2	COMM ROOM	CS-S9NKUA	230-395	0	8.5	-	-	-	-	-	-	13.1	21.0	-	-	-	208V, 1PH, 60HZ

NOTES:

1. AC-1 BASED ON TRANE CO. , AC-2 BASED ON PANASONIC

2. WITH ECONOMIZERS

3. TEMPERATURES IN DEGREES - FAHRENHEIT

4. AMBIENT TEMPERATURE = 90 DEGREES

HYDRONIC COIL SCHEDULE													
MARK	LOCATION	TYPE & MODEL NO.	FINS/FT	MBH	GPM	CFM	EAT	EWT	LAT	WTD	WPD	APD	FACE VELOCITY (FPM)
HWC-1	DUCT MOUNTED, AC-1	24"x32" TYPE 5W - 2 ROW	124	264.72	26.38	3303	46.10	200	120	20	1.29	0.27	619
NOTES: 1. BASED ON TRANE CO. 2. TEMPERATURES ARE IN DEGREES - FAHRENHEIT													

VARIABLE AIR VOLUME BOX SCHEDULE						
MARK	MOUNTING LOCATION	AREA SERVED	REQUIRED CFM	ELECTRICAL	MODEL NO.	REMARKS
VAV-1	CLERKS 102	CLERKS 102	225	24 VAC	VCCF06	6" INLET
VAV-2	SUPERVISOR 103	SUPERVISOR 103	250	24 VAC	VCCF06	6" INLET
VAV-3	CREW LEADER 104	CREW LEADER 104	350	24 VAC	VCCF08	8" INLET
VAV-4	MEN'S LOCKERS 110	MEN'S LOCKERS 110	178	24 VAC	VCCF05	5" INLET
VAV-5	MEN'S RESTROOM 110	MEN'S RESTROOM 110	300	24 VAC	VCCF06	6" INLET
VAV-6	WOMEN'S RESTROOM 111	WOMEN'S RESTROOM 111	200	24 VAC	VCCF05	5" INLET
VAV-7	CONFERENCE ROOM 112	CONFERENCE ROOM 112	700	24 VAC	VCCF10	10" INLET
VAV-8	BREAK ROOM 113	BREAK ROOM 113	600	24 VAC	VCCF08	8" INLET
VAV-9	HALLWAY 100	HALLWAY 100	500	24 VAC	VCCF08	8" INLET
BYPASS	CEILING PLENUM - BYPASS DUCT	-	1983	24 VAC	VADA-14x12	14"x12" INLET
NOTE: BASED ON VARITRAC DAMPERS BY TRANE CO.						

EXHAUST FAN SCHEDULE							
MARK	AREA SERVED	TYPE & MODEL NO.	CFM	SP"	TIP SPEED	FAN RPM	MOTOR
ERV-1	WASH BAYS	ROOF MOUNTED 180C5B	3048	0.125	4151	881	1/2HP, 208V, 3PH, 60HZ
ERV-2(A) THRU (B)	BAYS 10-12	ROOF MOUNTED 165C3B	2315	0.125	3831	887	1/4HP, 115V, 1PH, 60HZ
ERV-3	RESTROOMS & LOCKERS	ROOF MOUNTED 100C2B	800	0.500	4586	1752	1/6HP, 115V, 1PH, 60HZ
ERV-4	JANITOR'S	ROOF MOUNTED 60C2B	108	0.250	2968	1134	1/6HP, 115V, 1PH, 60HZ
ERV-5	MECHANICAL ROOM	ROOF MOUNTED 100C2B	817	0.125	4052	1548	1/6HP, 115V, 1PH, 60HZ
ERV-6(A) THRU (D)	BAYS 1-9	ROOF MOUNTED 180C4B	2813	0.125	3864	820	1/3HP, 115V, 1PH, 60HZ
AF-1	ELECTRICAL ROOM	WALL MOUNTED S1-8	408	0.250	-	860	1/8HP, 115V, 1PH, 60HZ
EF-1	BREAK ROOM	ROOF MOUNTED CUBE-99	674	0.500	-	1336	1/6HP, 115V, 1PH, 60HZ
NOTES: 1. ERV'S BASED ON LOREN COOK 2. AF-1 AND EF-1 BASED ON GREENHECK							

CONDENSING UNIT SCHEDULE									
MARK	AREA SERVED	EQUIPMENT SERVED	MODEL NO.	TONS	REFRIG.	NO. OF CIRCUITS	SEER	MOTOR	VOLT/PH/HZ
CU-1	COMM. ROOM	AC-2	CU-S9NKUA	0.75	R-410A	1	21.0	-	208V, 1PH, 60 HZ
NOTES: 1. BASED ON SANYO CO. 2. PROVIDE WITH LOW AMBIENT CONTROLS									

PADDLE FAN SCHEDULE						
MARK	MODEL NO.	BLADE SWEEP	DOWN ROD LENGTH	CFM	RPM	MOTOR
PF-1(A) THRU (B)	56101	56"	24"	25,500	265	110W, 115V, 1PH, 60HZ
PF-2(A) THRU (D)	56301RDP	56"	24"	27,000	275	110W, 115V, 1PH, 60HZ
NOTES: 1. BASED ON LEADING EDGE INC. 2. COLOR: WHITE 3. PF-1 SHALL BE WATERPROOF 4. BOTTOM OF FAN SHALL BE 16' min ABOVE SLAB. CUT DOWN ROD AS REQUIRED						

PUMP SCHEDULE					
PUMP	AREA SERVED	TYPE & MODEL NO.	GPM	HEAD (FT)	MOTOR
C1	BAYS 1-9	1635-2"	57	31	3/4HP, 208V, 3PH, 60HZ
C2	WASH BAYS & BAYS 10-12	1615-1½"	40	22	1/2HP, 208V, 3PH, 60HZ
C3	OFFICE - HEATING COIL	1611-1½"	27	19	1/3HP, 115V, 1PH, 60HZ
C4	OFFICE - FTR & CONV.	IL 0011-1¼"	11	15	1/8HP, 115V, 1PH, 60HZ
C5	MECHANICAL ROOM	IL 009-1"	7	11	1/8HP, 115V, 1PH, 60HZ
C6	BOILER SECONDARY	KV 3006-3"x3"	107	10	1HP, 208V, 3PH, 60HZ
C7	BOILER SECONDARY	KV 3006-3"x3"	107	10	1HP, 208V, 3PH, 60HZ
NOTE: BASED ON TACO.					

CONVECTOR SCHEDULE									
MARK	LOCATION	MODEL NO.	GPM	MBH	H x D x L	EWT	LWT	EAT	TYPE
C-1	VESTIBULE	SW-A	0.40	3.9	14" x 4" x 32"	200	180	65	SLOPETOP
C-2, C-3, C-4	HALLWAY	SW-A	0.52	5.0	14" x 4" x 10"	200	180	65	SLOPETOP
CUH-1	WOMEN'S RESTROOM	RC-1200	1.22	11.8	25" x9 1/2" x 35"	200	180	65	CEILING
CUH-2	MEN'S RESTROOM	RC-1200	1.22	11.8	25" x9 1/2" x 35"	200	180	65	CEILING
CUH-3	MEN'S LOCKERS	RC-1200	1.22	11.8	25" x9 1/2" x 35"	200	180	65	CEILING
NOTES: 1. BASED ON VULCAN RADIATOR 2. TEMPERATURES ARE IN DEGREES - FAHRENHEIT 3. H x D x L DIMENSIONS DO NOT INCLUDE END POCKETS 4. CUH-1 THRU 3 MOTOR: 1/15HP, 115V, 1PH, 60HZ									

FINNED TUBE RADIATION SCHEDULE									
MARK	AREA SERVED	BTU PER FT @ 190° F AVG. WT. TEMP	TUBE SIZE	TUBE TYPE	FIN SPACING	FIN SIZE	COVER STYLE	ENCLOSURE HEIGHT	MOUNTING
R-3, R-4	OFFICE	1140	1-1/4"	CU - AL	48 FINS/FT	3 1/4" x 3 1/4"	FS5	14"	WALL
R-1, R-2, R-5	OFFICE	900	1-1/4"	CU - AL	32 FINS/FT	3 1/4" x 3 1/4"	FS5	14"	WALL
NOTE: BASED ON RITTLING									

UNIT HEATER SCHEDULE									
MARK	TYPE & MODEL NO.	MBH	GPM	CFM	EWT	LWT	WPD	MOUNTING HGT	MOTOR
UH-1(A) THRU (B)	HORIZONTAL - 108 - S	78.4	7.9	1800	200	180	0.36'	11'	1/12HP, 115V, 1PH, 60HZ
UH-2(A) THRU (B)	HORIZONTAL - 180 - S	118	11.8	2200	200	180	0.60'	13'	1/3HP, 115V, 1PH, 60HZ
UH-3(A) THRU (E)	HORIZONTAL - 156 - S	113	11.3	2600	200	180	0.53'	13'	1/3HP, 115V, 1PH, 60HZ
UH-4	HORIZONTAL - 096 - S	62.7	7.0	1100	200	180	0.29'	11'	1/12HP, 115V, 1PH, 60HZ
NOTES: 1. BASED ON TRANE CO. 2. MOUNTING HEIGHT IS THE DISTANCE FROM THE FLOOR TO THE BOTTOM OF THE HEATER 3. TEMPERATURES ARE IN DEGREES - FAHRENHEIT									

SUPPLY FAN SCHEDULE						
MARK	AREA SERVED	TYPE	CFM	SP"	FAN RPM	MOTOR
SF-1	BREAK ROOM	ROOF MOUNTED RSF-90	679	.250	1180	1/4HP, 120V, 1PH, 60HZ
NOTE: BASED ON GREENHECK						

RETURN GRILLE SCHEDULE			
MARK	LOCATION	DIMENSION	CFM
RG1	CLERKS	10" x 10"	214
RG2	SUPERVISOR	10" x 10"	238
RG3	CREW LEADERS	12" x 12"	333
RG4	JANITOR'S CLOSET	6" x 6"	78
RG5	MEN'S LOCKERS	10" x 10"	196
RG6	MEN'S RESTROOM	12" x 12"	330
RG7	WOMEN'S RESTROOM	10" x 10"	220
RG8, RG9	CONFERENCE ROOM	12" x 12"	333
RG10, RG11	BREAK ROOM	10" x 10"	285
RG12, RG13	HALLWAY	8" x 8"	168

NOTES:
 1. BASED ON TITUS.
 2. DIMENSIONS ARE BASED ON CORE AREA.

DIFFUSER SCHEDULE							
MARK	LOCATION	FACE	DIMENSION	MOUNTING	MODEL	CFM	PATTERN
D1	CLERKS	SQ	9" x 9"	FL	G2	225	2 - W
D2	SUPERVISOR	SQ	9" x 9"	FL	G2	250	2 - W
D3	CREW LEADER	SQ	12" x 12"	FL	G2	350	2 - W
D4	MEN'S LOCKERS	SQ	9" x 9"	FL	G2	178	2 - W
D5	MEN'S RESTROOM	SQ	12" x 12"	FL	G2	300	4 - W
D6	WOMEN'S RESTROOM	SQ	9" x 9"	FL	G2	200	4 - W
D7, D8	CONFERENCE ROOM	SQ	12" x 12"	FL	A4	350	2 - W
D9, D10	BREAK ROOM	SQ	12" x 12"	FL	A4	300	2 - W
D11, D12	HALLWAY	SQ	9" x 9"	FL	S2	250	2 - W

NOTES:
1. BASED ON TITUS.
2. DIMENSIONS ARE BASED ON NECK AREA

[illegible]